

92 comprises a tubular body 42 having a central passage 44, a fishing lip 46 at the upper end thereof and an annular seating surface 48 at the lower end thereof sized to closely receive the ball 40. In other words, the seating surface 48 is generally hemispherical and has a radius of curvature matching that of the ball 40. The seating surface 48 is preferably recessed or nested into the sleeve 38 so that a portion of the ball 40 projects beyond the end of the sleeve 38. The main reason is that when the sleeve 38 contacts the ball 40 at the bottom of the well, the ball 40 prevents the sleeve 38 from contacting the bumper spring and either damaging the sleeve 38 or the bumper spring. Preferably, about 20-25% of the ball diameter projects below the sleeve 38.

IN THE CLAIMS:

Kindly amend claims 7 and 11, cancel claim 9 and add claims 16-20, all without prejudice, as follows:

93 7. (Amended) A plunger lift for a well producing through a production string communicating with a hydrocarbon formation, comprising a free piston having a lower section and at least one upper section, movable independently downwardly in the well, the sections being united at the bottom of the well and having an exterior seal for upward movement together in the well for pushing

93 liquid, above the piston, upwardly, the upper section being made of a titanium alloy having a tensile strength of at least 90,000 psi and the lower section comprises a ball made of a material selected from the group consisting essentially of silicon nitride and titanium alloys having a tensile strength of at least 90,000 psi.

SUBB3 11. (Amended) A method of lifting liquids from a well producing hydrocarbons from a formation with a plunger lift having a multipart piston made of a material having a density less than about .25 pounds/cubic inch selected from the group consisting essentially of silicon nitride and titanium alloys having a tensile strength of at least 90,000 psi, comprising

placing a bumper assembly in the well adjacent the formation;
dropping the lower section in the well;

dropping the upper section in the well and contacting the lower section at the bumper assembly;

uniting the upper and lower sections into a unit near the formation and moving the unit upwardly in the well in response to formation gases passing into the well and thereby pushing liquid upwardly with the piston.

SUBB4 16. A method of lifting liquids from a well producing hydrocarbons from a formation with a plunger lift having a multipart piston

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having at least one upper section and one lower section, movable independently downwardly in the well, the sections comprising a ball and a sleeve providing a seating surface for receiving the ball so the ball and sleeve join together in the well for pushing liquid, above the piston, upwardly, comprising

dropping the lower section in the well;

after the lower section is travelling downwardly in the well, dropping the upper section in the well;

uniting the upper and lower sections into a unit near the formation and moving the unit upwardly in the well in response to formation gases passing into the well and thereby pushing liquid upwardly with the piston.

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15 17. The method of claim 12 wherein the dropping steps occur when gas is flowing upwardly in the well.

18. The method of claim 16 wherein the dropping steps comprise dropping the lower section of the piston into the well, pausing for a time period and then dropping the upper section of the piston into the well.

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19. The method of claim 12 wherein the lower section is the ball and dropping the lower section comprises dropping the ball and the